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Field Interrogation of PAUL RAATZ of the  
German Army Signals Intelligence (1933 - 1945).

This report received from Colonel MATTISON, U.S.S.T.A.F. Advanced, adds nothing new to our knowledge of the German Army Signals Intelligence Organisation but it is of interest for the information given on intercept work from fixed stations inside Germany prior to 1939 and on field work on the Russian Front more recently. Of particular interest is the statement that a decoded Russian signal was responsible for the successful German operation against American for-  
tresses at POLTAVA on 21st June 1944 when 53 B.17's were destroyed and 15 B.17's and 23 P.51's were damaged, out of a force of 175 aircraft.

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10th August, 1945

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Note: this interrogation was conducted by Lts. M.R. Proctor,  
B.G. Kraus and the undersigned.

(signed) Hugh M. Davidson  
Capt., A.C.

Subject's knowledge and experience:

1. The subject of this report, Paul Raatz, has been questioned in detail on his 11-year career in the German radio-intelligence service. His answers have been put together and are summarized in the following paragraphs. On the basis of them, an estimate may be made of the range of his experience and the limits of his knowledge. Until the last months of the war, he served as an enlisted man and NCO in intercept and d/f sections of field 'Y' units. He has, as a consequence, an operator's and technical NCO's knowledge of the problems of radio intercept and radio-location. For example, he is familiar with the external characteristics of tactical Russian traffic; he knows Russian network procedure. However his knowledge of higher levels of the German radio intelligence service is limited. What the parent organizations were and what planning and research lay behind the operations of a field 'Y' unit are questions to which Raatz can give only the outline of an answer. It seems, therefore, that the best disposition of the subject is to send him to a group such as that at IX AAF Headquarters, which is writing a history of German radio intelligence, based on the interrogation of former members of the service. There details such as those familiar to Raatz can be fitted into the whole story.

Career: beginnings in 'Y' work:

2. April to October, 1933. Before entering the army in April, 1933, Raatz had had no radio training. He had worked briefly for the Deutsche Reichsbahn after his general schooling was finished. After enlisting, he was sent to Stuttgart, where a fixed 'Y' station was operating at the time. There he worked on French air and military traffic, serving as an intercept and d/f operator. He left Stuttgart for a short time in this period for Marburg, where he continued to work on French traffic, and also spent time in Breslau and Liegnitz, training on Czech Army traffic. After his return to Stuttgart in October, he entered a field unit specializing in French interception, the 3 Kompanie Nachrichtenabteilung 9.

Prewar interception of French & Italian traffic;

3. October, 1933 to September, 1939. With the 3 N 9 he covered French traffic of the types intercepted at Stuttgart, although his unit was then working in the Saar and the Schwarzwald, apart from the parent organization.

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The following year (October, 1934 to October, 1935) was spent at Starnberg training on Italian traffic. A watch was kept on Italian internal radio networks, and on communications between Italy and her colonies. A small amount of air/ground traffic was heard. At the end of the year at Starnberg, Raatz returned to his unit to intercept French traffic. The company moved up and down the French border, following French military manoeuvres and monitoring traffic emanating from installations along the Maginot Line.

Campaign in West: French and Norwegian traffic:

4. September, 1939 to September 1940. During the first months of the war, the unit worked successively from Pirmasens, Eiffel and Saarphalz. Raatz was sent in April, 1940 with 18 other men to Norway in order to listen to Norwegian traffic. The volume of traffic was very great, and all in plain text. The unit was located first at Oslo, later at Trondheim and Bodo. In the middle of June, the Norwegian detachment returned to France, rejoining the rest of the company at Nevers. It was soon evident that there was no further French traffic of interest to be heard. A trip to Spain was undertaken in July, in the hope of hearing traffic relating to the situation at Dakar. The detachment worked from Pamplona and San Sebastian, but no relevant traffic was intercepted. After this brief jaunt, Raatz was transferred to a new unit, the Horchkompanie 610, which had been activated for operations on the Eastern Front against the Russians.

Travels and trials on the Eastern Front:

5. September, 1940 to May 1945. In the new unit, Raatz worked first at Tilsit. He moved to Memel in February of the following year, with a detachment engaged in d/f-ing only. When the war with Russia began, frequent moves interrupted the intercept and intelligence operations. After stops in Lithuania and Esthonia, he went to Pleskau in Russia, later to the region of Lake Ilmen, settling finally at Volkhov. There the unit remained until 1943, intercepting and analyzing Russian traffic of all types, but mainly low grade air force communications. From October 1943 to June 1944 Raatz was in Frankfurt; he was furloughed because of a fever contracted on the Eastern Front. During the period of convalescence, he served in a replacement school for radio intelligence units which had been set up in Frankfurt. He was returned to Russia in June, 1944, this time to the central sector of the front at Minsk. He had already been transferred from the 610 Horchkompanie to the 520 Nachrichten Nahaufklaerung Kompanie while at Volkhov; on his arrival at Minsk he was assigned to the stab of a regiment known as the Kommandeur der Nachrichten Aufklaerung 2. After a few weeks he went into one of the intercept companies (the 958th) of the regiment, returning with it to Lomza in Poland and then to Ortelsburg in East Prussia (August, 1944). At this time he was ordered to the infantry. Two months of combat training followed at Schauen in Lithuania. In November he was chosen to go to Leipzig for schooling as an officer. He had been graduated only a few days when the war in Europe ended.

The German field 'Y' unit:

6. The following remarks, intended to characterize a German radio intercept company and its operations, are based on the account given by Raatz of his experience with the Funkhorchkompanie 610 and the 520 Nachrichten Nahaufklaerungskompanie on the Eastern Front against Russia.

7. The company fits into a chain of command which is shown on the attached diagram. Raatz states that there were 8 regiments engaged in radio intelligence work, which were distributed to the German army commands on a geographical basis. The first, second and third were in the East; the fourth in a Southeastern command; five and six were in the West; seven was

these regiments were composed of ground troops, but they covered all types of enemy traffic--point to point, air/ground, army and air force.

8. Company operations were divided among four platoons. The Horchzug intercepted the traffic; the Peilzug furnished bearings and fixes on enemy transmitters; the Auswertezug classified and analyzed the traffic, and where possible, issued intelligence reports; the Sendezug handled all problems of radio communication. The unit was designed to be completely mobile. D/f operations were always done from tents; the rest of the installation was set up in a house. In Russia, however, it was frequently necessary for the whole unit to operate in tents, because the "scorched earth" policy left no housing in its wake.

9. A normal program of intercept operations called for the use of approximately 20 receivers. These were of many designs and types, according to the frequency ranges demanded by the traffic being heard. Antennas were of the usual inverted 'L' type, averaging 60 meters in length, and from ten to twelve meters high. Masts for antennas eight meters high were always carried, but an effort was always made to find longer masts locally. Receivers were powered exclusively by batteries. The gasoline driven generators were used to power the transmitters.

10. The d/f organization was particularly elaborate. Normal d/f operations for one company called for an average of eight out-stations, spaced five to ten kilometers from each other and parallel to the front at a distance of from one to several hundred kilometers. The distance from company headquarters to the nearest outstation was generally twenty to thirty kilometers. Each station was completely mobile, and moved with the sectors of heavy fighting. Wire communication was occasionally available, but for the most part W/T communication was employed between outstations and headquarters. There was no communication between outstations. Bearings were requested by and at the discretion of, the duty officer at the intercept station. The outstations, listening on a common frequency, were advised of active enemy frequencies by means of messages sent in simple substitution cipher. Bearings were then returned, enciphered by a daily additive. Thirty to sixty seconds were required to notify all outstations of bearings required.

11. Raatz never actually worked in the Auswertung or evaluation section, and was not able to furnish much information regarding its tasks and procedures. This work was usually carried out in a room near the intercept station. As might be surmised, it was done in two main stages: study and classification of traffic from the point of view of external characteristics, and secondly, cryptanalysis.

#### 'Y' operations on the Eastern Front:

12. According to Raatz, Red air force communications were carried out on four levels. At the top was the air staff in Moscow. To it were subordinated a number of large operational commands (air forces) assigned to fronts. Below these commands came regional units, each centering about some principal airdrome, with many (up to 60) satellite fields which were controlled from the main base. Of all the radio networks involved in such an operational plan, those serving the regional commands were given the most attention by the field intercept unit. The traffic passed on them was usually in low grade cryptographic systems and could be exploited with the resources of such a 'Y' unit.

13. Point to point traffic among members of the regional network was always by W/T. The station located at the controlling airdrome in the area acted as network control. Its control functions were slight, however, being limited to relaying and monitoring; any member of the network could call any other member without going through the main station. Traffic between

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aircraft in the air was always by R/T, in clear text. Air/ground traffic was mainly by R/T, although larger aircraft— transports and bombers, for example—used W/T. In these cases, the messages were of a navigational sort, sent in the international Q-code. The favored frequency range for all these types of traffic extended from 3000 to 6000 kilocycles. Only rarely was the M/F band used.

14. As to content, the regional point to point traffic fell into four categories:

- A) Air raid warnings: sent either in the clear or in a cipher which was a mixture of figures and letters. These were passed to the main stations from the satellite fields, each of which maintained an air raid warning service. These reports were also monitored by flak commands in the area.
- B) Messages concerning starts of operations: These contained information as to the numbers and types of aircraft taking off and the intended targets. The traffic was made up of 3-character groups, with both figures and letters. This class of messages was not consistently read (keys changed daily), but the appearance of the characteristic groups in traffic served to warn the Germans of coming operations, even though details were lacking.
- C) Weather reports: likewise made up of figures and letters. Three-letter groups were used to indicate the type of observation; five-and-six-figure groups were used for enciphering the observations.
- D) Airfield serviceability reports: with letter or figure groups, maximum of four characters per group.

Types (A) and (B) were regularly read; type (C) was occasionally read.

15. Whenever intelligence susceptible of immediate exploitation was derived from intercepted traffic, it was placed in the hands of the air-liaison officer on the Abteilung level, and he passed it to the appropriate operational command of the Luftwaffe for action. Some examples of operations planned from intercept results were: attacks on aircraft whose movements were outlined in the start messages (14, B above); bombing of enemy radio installations which had been located by d/f-ing. As an outstanding instance of a 'Y' inspired operation, Raatz recalled the attack on American fortresses at the Poltava airfield where they had landed after a shuttle flight from British bases. A Russian message announcing the presence of the forts on the field was intercepted and decoded. A very successful operation was the result.

16. Although Russian traffic monitored by Raatz's unit gave tactical information mainly, the air/ground traffic often furnished intelligence which might be called strategic. With homings, bearings and other navigation traffic as the point of departure, it was possible to follow the disposition of Russian air units and to estimate their size. A detailed battle order could not be drawn up because of the difficulties involved in identifying particular units from the traffic; but the volume of air/ground working at any airdrome was a useful indication of its serviceability and operational status.

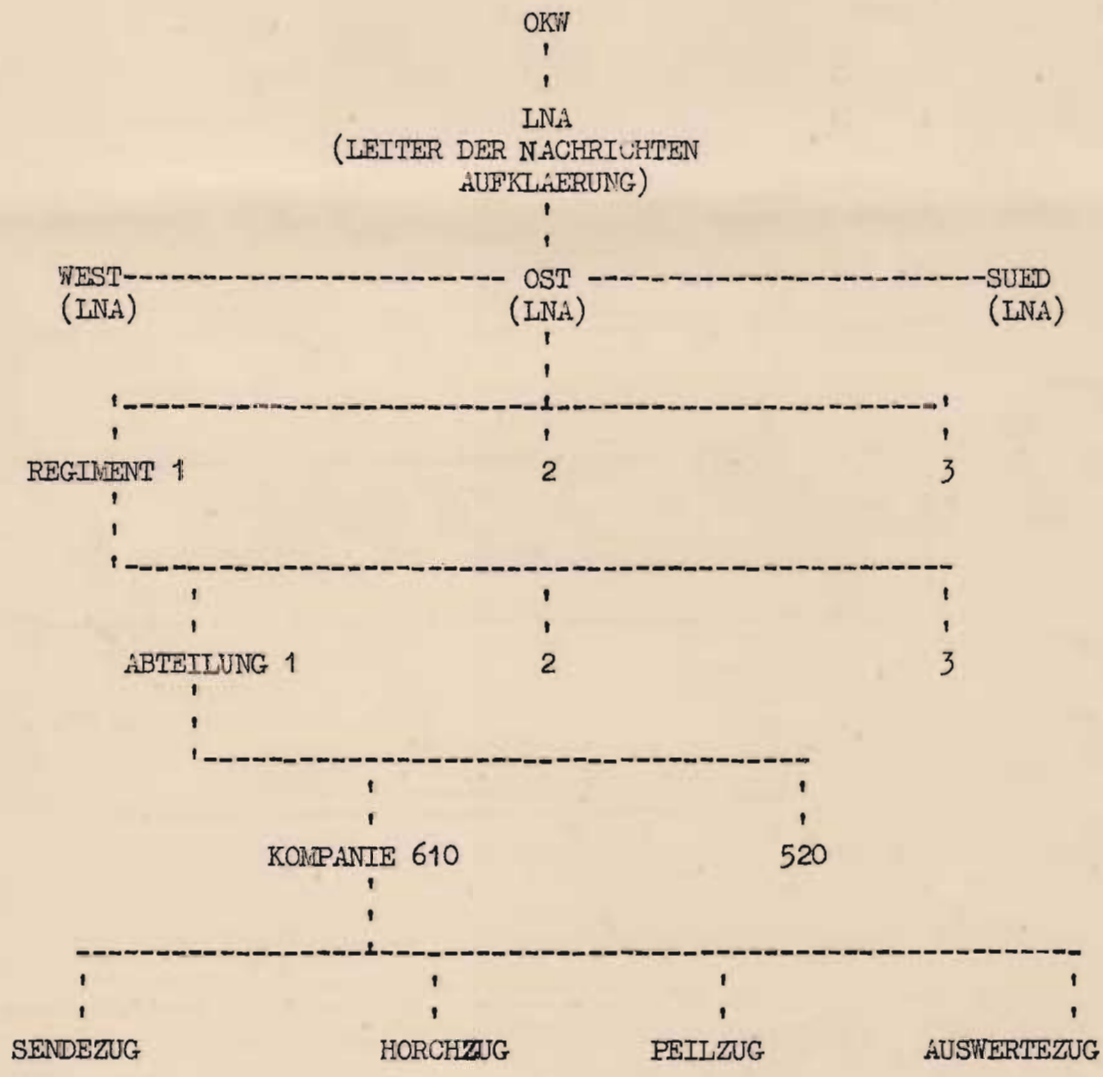
#### Historical notes on German radio intelligence:

17. The birth of the German 'Y' system after the last war occurred during the years 1923 and 1924, when the first of the fixed intercept stations (Festnachrichtenaufklaerungsstellen) was set up. To Raatz's knowledge, at least seven such stations were operating prior to 1933. Six of these were devoted primarily to military traffic. Stuttgart covered French.

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Dutch and Belgian traffic; Munich, Italian and Balkan traffic; Munster, English, Dutch, Belgian, Danish and some French traffic; Konigsberg, Russian, Polish, Finnish and Swedish traffic; Liegnitz, Czechoslovakian, Polish and Russian traffic; Breslau, Czech and possibly other eastern traffic. All of these stations intercepted as well some diplomatic traffic, but the bulk of diplomatic communications were intercepted at the seventh fixed station, Treuenbrietzen, which apparently did not specialize as to nationality. In 1933 the installation at Munich moved to Starnberg, where it remained to the last. Intercepted messages were sent to the Chiffrierstelle in the Kriegsministerium, at Berlin.

18. In 1933 the first mobile intercept companies, seven in number, were formed. Each was assigned work on traffic of a particular nationality, and each had a nucleus of trained personnel from the staffs of the fixed stations. The mobile stations reported their findings to both the fixed stations concerned and to the Chiffrierstelle in Berlin. In 1940 a great growth of mobile units occurred, and the maximum strength was apparently quickly attained. Raatz stated that no great difficulty was experienced by any of the intercept organizations in reading military traffic prior to this war. Much of it, indeed, was in plain language. He did not know the degree of success attained in reading diplomatic traffic.



See Paragraph 7